

299231

# Aircraft Certification Service

## Transport Airplane Directorate "Short" Domestic Worksheet

2004-NM  
108-AE

DOCKET NUMBER:

Master Dim & Test Single Point Failures

TECH WRITER:

**Manufacturer's Service Information/Revision/Date (Attach 2 clean copies):** 737-33-1132, Rev. 1 dated March 04, 2004; 737-77-1022 Rev. 1, dated Oct. 26, 1989; 737-33-1133, Rev. 2, dated Dec. 4, 2003; 737-26A-1083 Rev. 1, Dated Nov. 15, 2001; 737-33-1121 Rev. 1, Dated Dec. 19, 2002.

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**PROPOSED CORRESPONDING ACTION:**

<p><input type="checkbox"/> Emergency AD</p> <p><input type="checkbox"/> Immediately Adopted AD</p> <p><input checked="" type="checkbox"/> Notice of Proposed Rulemaking</p> <p><input type="checkbox"/> Final rule after NPRM (If FRAN, complete Attachment A.)</p> <p><input type="checkbox"/> Other (No-Notice Final Rule)</p>	<p style="text-align: center;"><b>ANM-114</b></p> <p><i>Is this action one of the following?</i></p> <p><input type="checkbox"/> Supersedure of AD (Docket No. TBD)</p> <p><input type="checkbox"/> Revision of AD (Docket No. TBD)</p> <p><input type="checkbox"/> Supplemental NPRM (Docket No. TBD) (If any of the above is checked, complete Attachment B.)</p>
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FAA - 2004 - 19245 - 4

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**1. Model, Applicability, # Airplanes (both U.S. & worldwide) - Refer to SB; state any differences for this AD:**

**Model:** Boeing 737 all certain ups as listed in service bulletins

**Applicability:** See Boeing Service Bulletins (SB) 737-33-1132, Rev. 1 dated March 4, 2004 for 737-300/400/500; 737-33-1133, Rev. 2, dated December 4, 2003 for 737 NG

# U.S. airplanes: 1181

Source:

# worldwide airplanes: 2868

**AD Summary and Discussion Sections:****2. What has the manufacturer told the FAA?***"The FAA has received reports indicating that..."**Describe background/events that prompted the AD in 1-2 sentences. Refer to SB 'Reason.'*

Boeing found that the master dim and test system circuit in some airplanes does not have wiring separation of the test ground signal for redundant equipment in the flight compartment. This could allow a single fault to simulate a test condition in some flight compartment annunciators, switches and displays. The test condition could cause the communications panel to show a test pattern and not show which frequencies the radios are tuned to. If the frequency does not show on the communications panel, there could be an effect on the continued safe flight of the airplane.

**3a. What is the unsafe condition AND its cause?***"These actions are intended to prevent..."**Describe unsafe condition and its cause in 2-3 sentences (non-technical terms). Refer to SB 'Reason.'*

4/13/2004

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A single fault can simulate a test condition that activates several flight deck annunciators, switches and display, including the communication panel and ATC displays such that the selected frequency can not be determined from the display.

**3b. What is the end-level effect on the airplane?**

*"...which could result in..."*

*Provide a 1-sentence description; use non-technical terms.*

If the frequency does not show on the communications panel, there could be an effect on the continued safe flight of the airplane.

**AD Relevant Service Information Section:**

**4. (Yes or No) Is the corrective action required in this AD considered to be interim action?**

NO

**5. (Yes or No) Is this action considered 'sensitive', or is it related to a Safety Recommendation?**

*(If yes, state why sensitive, and/or provide copy of FAA/NSTB Safety Recommendation.)*

NO

**6. Does the referenced service document include reference to an "operator's equivalent procedure?"**

*[If yes, specify whether that procedure employed by the operator (even if not technically 'equivalent') adequately addresses the identified unsafe condition and provides an acceptable level of safety.]*

NO

**7. AD Differences Section (if needed):**

*"This AD differs from the SB ....*

Check if: Flight with Cracks ☐ Mandate Terminating Action ☐ Contact Mgr, FAA ☐  
Compliance time ☒ Mandate AFM Action ☐

*Describe any other differences between service bulletin and this proposed FAA AD.*

~~NO~~  
Stat

**AD Cost Impact Section:**

**8a. Work hours for corrective action(s) required: (List hours or reference SB 'Manpower').**

SB 737-33-1132 14 work hours for modification  
737-33-1133 3 work hours for modification  
Inspection/Correction: 21 hours for 737CL, 4.75 hours for 737NG

**8b. Parts Cost, if any: (List costs or reference SB 'Material - Cost and Availability').**

None

## 9. AD Body Section:

**For EACH corrective action, mark up SB, if usable -OR- fill out Corrective Action Table below.**

### 9a: Action # 1

*What is the corrective action?*

For 737-300/400/500 airplanes, make the wiring changes to the W002, W149, W242, W319, W327, W350, W403, W405 and W407 wire bundles by following accomplishment instructions in Boeing S/B 737-33-1132, Rev. 1 dated March 4, 2004. For group 57 airplanes please see action #2 a) 737-300/400/500.

For 737NG, at the P8 panel, make wiring change to the W2149, W2401, W2403, W2413, W3319, W3323, W2265, W5514 wire bundles by following the accomplishment instruction in Boeing 737-33-1133, Rev. 2, dated Dec 4, 2003. For group 4-5, 7, 15-16, 20, 24-25, 29-30, 33, 37, 39-41, and 46 airplanes please see action # 2 b) 737NG.

*What is its compliance time?*

Within 30 months of the effective date of this AD.

*(Add grace period if not available)*

*What is repetitive interval?*

None

### 9b: Action # 2

*What is the corrective action?*

a) 737-300/400/500: Boeing service bulletins 737-77-1022, revision 1, dated October 26, 1989, and 737-77-1023, revision 1, dated November 9, 1989 are necessary to be accomplished prior to or concurrent with service bulletin 737-33-1132.

b) 737NG: Boeing service bulletin 737-26A1083 is necessary to be accomplished prior to or concurrent with the service bulletin 737-33-1133, Rev. 2, dated Dec 4, 2003 for 737NG group 39 airplanes. Boeing service bulletin 737-33-1121 is necessary to be accomplished prior to or concurrent with service bulletin 737-33-1133, Rev. 2, dated Dec 4, 2003 for 737NG group 4-5, 7, 15-16, 20, 24-25, 29-30, 33, 37, 39-41, and 46 airplanes. Group 2 airplanes in Boeing Service Bulletin 737-33-1121, must have splice SP896 added by Boeing service bulletin 737-26A1083.

*What is its compliance time?*

*(Add grace period if not available)* N/A

*What is repetitive interval?*

None

**10. (Yes or No) Should corrective action(s) required in this AD to be applied to spares as well?**

NO

**11. Should a ferry flight permit be:**  X  Permitted      Permitted with limitations\*      Prohibited    

\*List limitations.

**12. With whom outside the FAA has this proposal been discussed (i.e. ATA, RAA, ALPA, etc.)?**

**NOTE: This item should be completed prior to submission of the AD Proposal Worksheet.**

<u>Organization</u>	<u>Person Contacted</u>	<u>Date</u>	<u>Reaction</u>
BCAG	Loc Tran	4/02/03	Concurred
ATA	Charlie Bautz	3/18/04	Concurred

**13. Check the appropriate response:**

Yes ☐ No ☒ Does this action affect the Presidential fleet?

Yes ☐ No ☒ Does this action affect the FAA fleet?

Yes ☐ No ☒ Was this action prompted by the use of suspected unapproved parts (SUP)?

**14. Check the category that best describes the cause of the unsafe condition addressed by this AD:**

<input checked="" type="checkbox"/> Design Problem	<input type="checkbox"/> Unapproved Parts	<input type="checkbox"/> Operational
<input type="checkbox"/> Maintenance	<input type="checkbox"/> Quality Control Problem**	<input type="checkbox"/> Other (specify): _____
	<input type="checkbox"/> **Reporting Reqt Needed?	_____